

# EMC Symmetrix DMX1000

## Open Systems and Mainframe Specifications

### Sample Configuration Data

73GB Drives			Addressable Drives			Mirrored Usable Capacity (GB)*			Maximum Global Memory (GB)**
Addressable Drives	SRDF Usable Capacity (GB)*		Addressable Drives	Open	Mainframe	Open	Mainframe		
	Open	Mainframe							
48	3,508	3,464	24	1,754	1,732			64	
64	4,678	4,618	32	2,339	2,309			64	
96	7,017	6,928	48	3,508	3,464			64	
128	9,356	9,237	64	4,678	4,618			64	
144	10,526	10,392	72	5,263	5,196			64	

  

Addressable Drives			Parity RAID (3+1) Usable Capacity (GB)*			Addressable Drives			Parity RAID (7+1) Usable Capacity (GB)*			Maximum Global Memory (GB)**
Addressable Drives	Parity RAID (3+1) Usable Capacity (GB)*		Addressable Drives	Open	Mainframe	Open	Mainframe					
	Open	Mainframe										
36	2,631	2,598	42	3,070	3,031					64		
48	3,508	3,464	56	4,093	4,041					64		
72	5,263	5,196	84	6,140	6,062					64		
96	7,017	6,928	112	8,187	8,083					64		
108	7,894	7,794	126	9,210	9,093					64		

  

146GB Drives			Addressable Drives			Mirrored Usable Capacity (GB)*			Maximum Global Memory (GB)**
Addressable Drives	SRDF Usable Capacity (GB)*		Addressable Drives	Open	Mainframe	Open	Mainframe		
	Open	Mainframe							
48	7,008	6,940	24	3,504	3,470			64	
64	9,344	9,254	32	4,672	4,627			64	
96	14,016	13,881	48	7,008	6,940			64	
128	18,688	18,508	64	9,344	9,254			64	
144	21,024	20,822	72	10,512	10,411			64	

  

Addressable Drives			Parity RAID (3+1) Usable Capacity (GB)*			Addressable Drives			Parity RAID (7+1) Usable Capacity (GB)*			Maximum Global Memory (GB)**
Addressable Drives	Parity RAID (3+1) Usable Capacity (GB)*		Addressable Drives	Open	Mainframe	Open	Mainframe					
	Open	Mainframe										
36	5,256	5,205	42	6,132	6,073					64		
48	7,008	6,940	56	8,176	8,097					64		
72	10,512	10,411	84	12,264	12,146					64		
96	14,016	13,881	112	16,352	16,195					64		
108	15,768	15,616	126	18,396	18,219					64		

Configurations of mixed 73GB and 146GB disks are allowed.  
 Parity RAID 3+1 or 7+1 and RAID 1 (Mirroring) can coexist in the same system.  
 Parity RAID 3+1 and Parity 7+1 cannot coexist in the same system.  
 12GB of the total raw capacity will be reserved for internal Symmetrix File System use.  
 \*All capacities are based on 1GB=1,000,000,000 bytes.  
 \*\*Individual system global memory sizes are based upon specific configurations and customer requirements.

### Disk Drive Connectivity

Disk Directors	2
Total number of 2Gb Fibre Channel ports	16
Number of redundant 2Gb Fibre Channel loops	8
Disk Drives per redundant Fibre Channel loop	up to 18

### Host Connectivity

DMX1000	Open Systems		Mainframe	
	Min	Max	Min	Max
Fibre Channel Ports	16	48	-	-
Gigabit Ethernet Ports	4	24	-	-
iSCSI Ports	4	24	-	-
ESCON Ports	-	-	16	48
FICON Ports	-	-	4	24

Note: Mixed combinations of the above port types are supported.  
 Maximum supported ports and combinations are dependent upon application, host, and protocol configuration.  
 ESP software is required to run mainframe with open systems interfaces.

### Disk Emulation

DMX1000	Open Systems	3380K	3390-1	3390-2	3390-3	3390-9	3390-27
MB/Volume	30,720	1,891	946	1,892	2,838	8,514	27,845
Bytes/Track	32,768	47,476	56,66 4	56,66 4	56,66 4	56,66 4	56,664
Bytes/Cylinder	491,520	712,140	849,960	849,960	849,960	849,960	849,960
Cylinders/Volume	65,536	2,655	1,113	2,226	3,339	10,017	32,760



## Hyper-Volume Extension (HVE)

	Open Systems			Mainframe					
	2GB*	4GB*	9GB*	3380K*	3390-1	3390-2*	3390-3*	3390-9*	3390-27*
<b>73GB Drives</b>									
Maximum Complete Logical Volumes	36	18	8	36	75	37	25	8	2
<b>146GB Drives</b>									
Maximum Complete Logical Volumes	73	36	16	73	128	75	50	16	5

Hyper-Volume Extension provides the ability to configure a single physical disk device as multiple logical volumes in logical-to-physical relationships ranging from 1:1 to 128:1.

\* A single physical disk device can support multiple model types within a single data format emulation mode.

## Available Software\*

<b>Platform Software</b>	Double Checksum InfoMover SRDF/Data Mobility TimeFinder	SRDF/A EMC Snap ECRC	Enterprise Storage Platform (ESP) Symmetrix Remote Data Facility (SRDF) Symmetrix Data Migration Services (SDMS)
<b>Intelligent Supervision</b>	ControlCenter Automated Resource Manager ControlCenter StorageScope ControlCenter Symmetrix Manager ControlCenter Symmetrix Optimizer ControlCenter SAN Manager	ControlCenter SAN Architect ControlCenter AutoAdvice ControlCenter Common Array Manager ControlCenter Workload Analyzer ControlCenter Database Tuner	
<b>Information Safety</b>	EMC Data Manager (EDM) ControlCenter Symmetrix Data Mobility Manager CopyCross	EMC Replication Manager ControlCenter SRDF/TimeFinder Manager	
<b>Infrastructure Services</b>	GeoSpan Family ResourcePak for Windows	COMPAV/MA PowerPath	ResourcePak Base for OS/390 and z/OS ResourcePak Extended for OS/390 and z/OS

\* Contact your EMC sales representative for software license model numbers, prerequisites, and additional information.

## Interoperability Support

Symmetrix systems support all popular hardware and operating system platforms, storage area networks (SANs), and high-availability cluster environments. Refer to the EMC Support Matrix on EMC.com or contact your local EMC sales representative for specific configuration support.

## Physical Specifications\*

Height** (in/cm)	Width (in/cm)	Depth (in/cm)	Front Service Area (in/cm)	Rear Service Area (in/cm)
75.37/191.44	24.13/61.29	37.37/94.92	36.0/91.44	36.0/91.44

\*Values represent maximum figures for each configuration.

\*\*An additional 18 inches (45.7cm) is required for ceiling/top clearance.

## Weight\*

<b>Physical Drives</b>	<b>48</b>	<b>64</b>	<b>96</b>	<b>128</b>	<b>144</b>
Weight (lb/kg)	1,293/588	1,353/616	1,413/642	1,493/679	1,533/697

\*Values represent maximum figures for each configuration.

## Power and Cooling Data\*

<b>Physical Drives</b>	<b>48</b>	<b>64</b>	<b>96</b>	<b>128</b>	<b>144</b>
Power Consumption (kVA)	2.2	2.5	3.1	3.8	4.1
Heat Dissipation (Btu/hr)	7,982	9,168	11,541	13,914	15,100

\*Values represent maximum figures for each configuration.

## Power Specifications

	North America	International
Input Voltage (VAC)	200-240, single phase	200-240, single phase
Frequency (Hz)	47-63	47-63
Circuit Breaker (Amps), recommended	32	32
Power Drops	2	2
Power Connector	(2) 9P63U2T	Country Specific
User Connector	(2) 9C63U2T	Country Specific
Auto-Call Modem Requirements	North American installations require connection to a 110VAC power source at 60Hz through a NEMA 5-15R receptacle. International installations are country specific.	

## Environmental Specifications (operating)

Temperature (°F/°C)	50-90°F/10-32°C
Altitude (ft/m), max.	8,000/2,500
Humidity (%), non-condensing	20-80
Raised Floor	Required



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Specification Sheet

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